



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/095,365	06/10/1998	TAKESHI KAKINUMA	163852016000	9569

25227 7590 12/04/2002

MORRISON & FOERSTER LLP
1650 TYSONS BLVD. - SUITE 300
MCLEAN, VA 22102

EXAMINER

GRAY, LINDA LAMEY

ART UNIT	PAPER NUMBER
----------	--------------

1734

DATE MAILED: 12/04/2002

28

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/095,365

Applicant(s)

KAKINUMA ET AL.

Examiner

Linda L Gray

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. **Claims 1-2, 4, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark, Jr. et al. (US 4,966,644).**

Claims 1 and 14, Clark, Jr. et al. (Clark et al.) teach a sheet sorting apparatus for adhering marker 3 to predetermined sheet 4 including

- (a) tape feeder 38 for pulling out tape 13 having heat/pressure sensitive adhesive 15 on one side edge 17 where feeder 38 includes a pair of feed rollers 70 and 71,
- (b) cutter 39 for making marker 3 by cutting tape 13 at a preset length (c 4, L 56-60),
- (c) guide 35 for positioning marker 3 to a predetermined position on sheet 4, and
- (d) marker-and-sheet-feeder 41 for feeding marker 3 and sheet 4 in partially overlapping position wherein marker 3 is adhered to sheet 4 by a predetermined pressure force (caused by rollers 108/109) as they pass through feeder 41.

Column 10, line 61, to column 11, line 5, teaches that marker 3 and sheet 4 are moved through marker-and-sheet feeder 41 at the same time. Also, the same location indicates that the feeding is continuous for each individual sheet 4 and associated marker 3.

Note that claim 1 requires (x) "contact and no-contact" or (y) "contact or no-contact". In Clark, Jr. et al. marker-and-sheet-feeder 41 is formed as a pair of feeding means 108/109 for positioning in contact with and separate from each other, column 7, line 63, to column 8, line 3, thus meeting (y) above (p 4, L 34, to p 12, L 37).

Claim 2, marker 3 is adhered to an underside of sheet 4 in that marker 3 is adhered to the back (Fig 13). **Claim 4**, Clark et al. do not teach that the adhering position is changeable where use of the language "may" in claim 4 means that the adhering position can change but does not have to change.

Claim Rejections - 35 USC § 103

3. **Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Jr. et al. in view of Applicants' admitted prior art.**

Claim 12, the above discussion of Clark et al. applies herein. Also, Clark et al. teach using the sheet sorting apparatus in combination with an image processing apparatus at column 1, lines 11-21. Sheets 4 are manually placed in holder 115 for feeding to the sheet sorting apparatus.

Claim 12, the difference between claim 12 and Clark et al. is that Clark et al. do not teach that the image processing apparatus feeds sheets 4 to the sheet sorting apparatus.

However, Applicants' admitted prior art (AAPA) teaches that it is conventional for an imaging processing apparatus to include a sheet sorting apparatus where the image processing apparatus feeds the sheets to the sheet sorting apparatus. The sheets are then placed on a tray (pg 1, L 9, to p 2, L 11).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided

in Clark et al. that the image processing apparatus feeds sheets 4 to the sheet sorting apparatus because AAPA teaches that it is conventional to provide an imaging processing apparatus in combination with a sheet sorting apparatus that feeds the sheets to the sheet sorting apparatus where such a combination in Clark et al. would eliminate the manual labor of collecting sheets 4 from the image processing apparatus and placing sheets 4 manually into holder 115.

Claim 13, Clark et al. modified do not teach that at least one side of the tray is lower than the middle of the tray (i.e., tilted).

It is conventional to provide a tilted tray for receiving sheets from a sheet sorting apparatus because tilted trays aid in lining up the sheets correctly along a given side.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Clark et al. modified that at least one side of the tray is lower than the middle of the tray (i.e., tilted) because it is conventional to provide a tilted tray for receiving sheets from a sheet sorting apparatus because tilted trays aid in lining up the sheets correctly along a given side.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Jr. et al. as applied to claims 1-2, 4, and 14 above, and further in view of Vonderhorst et al. (US 5,556,492).

Claim 5, Clark et al. do not teach a sensor for marker 3 in a forward position of the apparatus.

Vonderhorst et al. teach the necessity of a sensor for a marker in a forward position of a label producing apparatus such that feed of the web material to make the marker can be halted when necessary. Sensor 52 for labels 14 in a forward position of a label producing apparatus is used such that the feed of web 12 to make labels 14 can be halted when necessary (c 2, L 28-30; c 3, L 54-60; c 6, L 38-51).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Clark et al. a sensor for marker 3 in a forward position of the apparatus because Vonderhorst et al. teach the necessity of a sensor for a marker in a forward position of a label producing apparatus such that feed of the web material to make the marker can be halted when necessary where unnecessary feed of the web material would cause backup of the web in the apparatus.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Jr. et al. as applied to claims 1-2, 4, and 14 above, and further in view of Nobile et al. (US 5,390,594).

Claim 6, Clark et al. do not teach a tape end detector on the path of tape 13 for signaling tape 13 exchange.

Nobile et al. teaches the necessity of a tape end detector on the path of a tape for signaling tape exchange so that the machine operating on the tape does not continue to operate unnecessarily. Detector 216 performs this operation (c 1, L 49-52; c 2, L 34-43; c 3, L 35-58; c 11, L 13, to c 12, L 29).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Clark et al. a tape end detector on the path of tape 13 for signaling tape 13 exchange because Nobile et al. teaches the necessity of having a tape end detector on the path of a tape for signaling tape exchange so that the machine operating on the tape does not continue to operate unnecessarily.

6. **Claims 1-2, 4, 7-8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busk (US 3,245,859) in view of Lowe et al. (US 3,926,713).**

Claims 1 and 14; Busk teaches a sheet sorting apparatus for adhering marker E to predetermined sheet D including

- (a) a tape feeder for pulling out tape K of plastic including a pair of feed rollers 35 and 36,
- (b) cutter 73/75 for making marker E by cutting tape K at a preset length,
- (c) guide N for positioning marker E to a predetermined position on sheet D, and
- (d) marker-and-sheet-feeder R for feeding marker E and sheet D in partially overlapping position (partially overlaps on one side and partially overlaps on the other side) wherein marker E is adhered to sheet D by a predetermined pressure force as they pass through feeder R, using heat where marker-and-sheet-feeder R includes a pairs of roller feeders for positioning in contact with each other.

Cutter 73/75 does not require sensors for activation (c 2, L 48, to c 5, L 47).

Column 2, line 70, to column 3, line 2, teaches that marker E and sheet D are moved through marker-and-sheet feeder R at the same time. Also, the same location indicates that the feeding is continuous for each individual sheet D and associated marker E.

Busk does not teach (x) that marker E has pressure sensitive adhesive on the bonding edges and (y) that the pairs of feed rollers contact-and-do-not-contact or that the pairs of feed rollers do-not-contact.

For (x), Lowe et al. teach a sheet sorting apparatus for adhering marker 53 to predetermined sheet 38 including

- (a) a tape feeder for pulling out tape 76 of plastic along or plastic having pressure sensitive adhesive on the bonding edges,
- (b) cutter 78' for making marker 53 by cutting tape 76 at a preset length, and
- (c) guide 79 for positioning marker 53 to a predetermined position on sheet 38 wherein marker 53 is adhered to sheet 38 by a predetermined pressure force, using heat

(c 2, L 23; to c 10, L 51).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Busk that marker E has a pressure sensitive adhesive on the bonding edges because Lowe et al. teach that such is a conventional alternative to plastic alone and it is obvious to replace one type of tab-tape (that of Busk) with another art recognized alternative type of tab-tape (that of Lowe et al.).

For (y), the above discussion of Clark, Jr. et al. applies herein. Note that the abutting and non-abutting nature of the pair of feed rollers in Clark, Jr. et al. allows for different thicknesses of material therebetween.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Busk that the pairs of feed rollers contact-and-do-not-contact to allow for different thicknesses therethrough as shown by Clark, Jr. et al.

Claim 2, marker E is adhered to an underside of sheet D.

Claim 4, *Busk does not teach that the adhering position is changeable where use of the language "may" in claim 4 means that the adhering position can change but does not have to change. In any event, if "may" means to change the position, Lowe et al. teach that such is possible using solenoids 40, 41, and 42 so that one can place marker 53 as desired or necessary.*

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Busk that the adhering position is possible because Lowe et al. teach making the adhering position of a tab possible gives one the freedom of placing the marker as desired or necessary.

Claims 7-8, the difference between claims 7-8 and Busk modified is that Busk modified does not teach a single motor for driving the feeder, cutter 73/75, guide N, and feeder R.

It is convention to use one motor to operate several items of an apparatus in order to save on the cost of purchasing more than one motor.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Busk modified single motor for driving the feeder, cutter 73/75, guide N, and feeder R in order to save on the cost of purchasing more than one motor.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Busk in view of Lowe et al. as applied to claims 1-2, 4, 7-8, and 14 above and further in view of Vonderhorst et al.

Claim 5, Busk modified does not teach a sensor for marker E in a forward position of the apparatus.

In view of Vonderhorst et al., it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Busk modified a sensor for marker E in a forward position of the apparatus because Vonderhorst et al. teach the necessity of a sensor for a marker in a forward position of a label producing apparatus such that feed of the web material to make the marker can be halted when necessary where unnecessary feed of the web material would cause backup of the web in the apparatus.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Busk in view of Lowe et al. as applied to claims 1-2, 4, 7-8, and 14 above, and further in view of Nobile et al.

Claim 6, Busk modified does not teach a tape end detector on the path of tape K for signaling tape K exchange.

In view of Nobile, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Busk modified a tape end detector on the path of tape K for signaling tape K exchange because Nobile et al. teaches the necessity of having a tape end detector on the path of a tape for signaling tape exchange so that the machine operating on the tape does not continue to operate unnecessarily.

9. Claims 3 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busk in view of Lowe et al. as applied to claims 1-2, 4, 7-8, and 14 above, and further in view of Cavender (US 4,070,220).

Claim 3, Busk modified does not teach a printer for markers E having a printer controller to apply the same indicia/color pattern to markers E.

It is conventional to provide a printer for labels clearly having a printer controller of some kind to apply the same indicia/color pattern to the labels where the labels can be mass produced. This is also demonstrated by Cavender.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Busk modified a printer for marker E having a controller to apply the same indicia/color pattern to markers E because it is conventional to provide a printer for labels clearly having a printer controller of some kind to apply the same indicia/color pattern to the labels so that the labels can be mass produced.

Claims 9-10, the difference between claim 9 and Busk modified is that Busk modified does not teach an inkjet printer (claim 9) or stamper (claim 10).

An ink jet printer and a stamper are conventional in the art. Note that Cavender does not restricted the printer to any one specific kind but indicates use of a "suitable" printer.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Busk modified an inkjet printer or stamper because an inkjet printer and a stamper are conventional printers, and it is obvious to replace one type of printer (that of Busk, modified, not specifically disclosed) with another art recognized alternative printer.

Response to Arguments

10. Applicants' comments of 9-13-02 have been fully considered. Applicants indicate that Clark does not teach that the sheet and the marker are fed at the same time. In response, claim 1 requires a marker-and-sheet-feeder to feed the marker and the sheet at the same time. In Clark, the marker-and-sheet-feeder is designated as item 41. Column 10, line 61, to column 11, line 5, of Clark teaches that marker 3 and sheet 4 are moved through item 41 at the same time.

Applicants indicate that in Clark the paper leading edge is stopped; thus, Clark does not teach the limitation of without pausing the marker and the sheet feeder. In response, it is granted that in Clark item 41 is stopped at some point. However, claim 1 requires the marker-and-sheet-feeder to not be stopped "as" the marker and sheet pass therethrough. In Clark, column 10, line 61, to column 11, line 5, indicates that the feeding is continuous for each individual sheet 4 and associated marker 3 "as" marker 3 and sheet 4 are feed through item 41.

Clark is not required to teach "and separated from each other when sheets not receiving a marker are fed" because claim 1 requires (x) "contact and no-contact" or (y) "contact or no-contact". Note that claim 1 requires (x) **or** (y), not just (x), see line 11 and the use of "and/or" in claim 1.

The same applies to claim 12.

Applicants indicate that Busk does not teach that the sheet and the marker are fed at the same time. In response, claim 1 requires a marker-and-sheet-feeder to feed the marker and the sheet at the same time. In Clark, the marker-and-sheet-feeder is designated as item R. Column 2, line 70, to column 3, line 2, of Busk teaches that marker E and sheet D are moved through item R at the same time.

Applicants indicate that does not teach the limitation of without pausing the marker and the sheet feeder. In response, claim 1 requires the marker-and-sheet-feeder to not be stopped "as" the marker and sheet pass therethrough. In Busk, column 2, line 70, to column 3, line 2, indicates that the feeding is continuous for each individual sheet D and associated marker E "as" marker E and sheet D are feed through item R.

Clark and Busk are not required to teach "and separated from each other when sheets not receiving a marker are fed" because claim 1 requires (x) "contact and no-contact" or (y) "contact or no-contact". Note that claim 1 requires (x) **or** (y), not just (x), see line 11 and the use of "and/or" in claim 1.

The same applies to claim 12.

In response to Applicants' comments on page 7 of the response, the limitation of "and separated . . . a marker are fed" (claims 1 and 12) is not required by the claims because of the use of "and/or" (claim 1, line 11; claim 12, line 10).

Conclusion

11. THIS ACTION IS MADE FINAL. Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications should be directed to Examiner Linda L. Gray at (703)308-1093, Monday through Friday, 6:20 am to 3:50 pm. The necessary fax numbers are (703)305-7718 (before final) and (703)872-9311 (after final). The Examiner's supervisor, Richard Crispino, can be reached at (703)308-3853.

llg

December 2, 2002

Linda L. Gray
LINDA GRAY
PRIMARY EXAMINER